

# RECHERCHE EX.

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C11D 17/04

(52) UK CL (Edition O )  
CSD DDX D181

(56) Documents Cited

GB 2187748 A	GB 2118961 A.	EP 0479404 A2
EP 0414463 A2	EP 0388105 A2	EP 0337568 A2
US 4972017 A	US 4410441 A	US 4115292 A

(58) Field of Search

UK CL (Edition O ) CSD DDX DHC DHZ  
INT CL<sup>6</sup> C11D

(54) Dissolvable container

(57) A dissolvable container pre-filled with an appropriate cleaning material, is put straight into a washing or dishwashing machine.

The size would be such that total flexibility is offered in terms of wash size, and also so that it is small enough to be easily handled.

The material of the container dissolves in the water, releasing the cleaning agent, which then operates as normal. The conditioning element of the wash (or rinse aid for dishwashers) could go into a similar device which is built to dissolve at a later point in the wash cycle.

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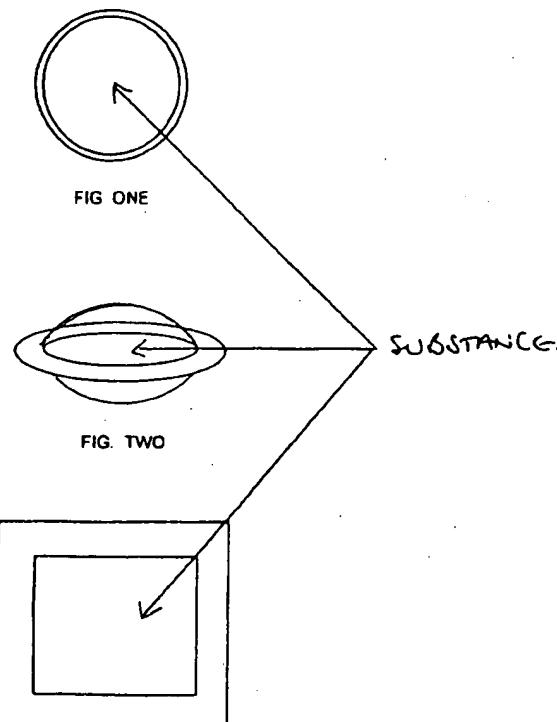


FIG. THREE

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995

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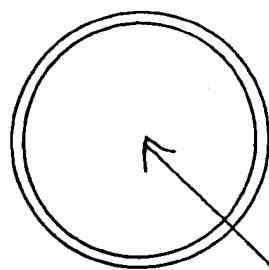


FIG. ONE

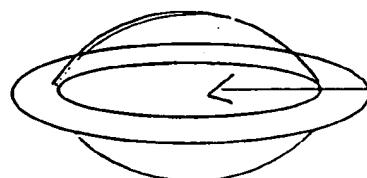


FIG. TWO

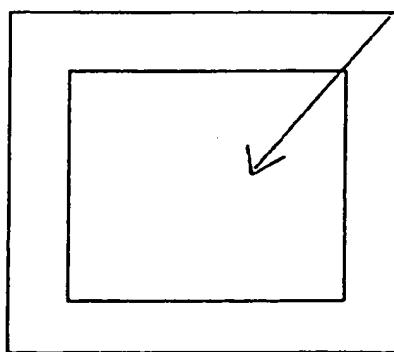


FIG. THREE

SUBSTANCE.

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**PATENT APPLICATION**

The claim relates to a dissolvable (soluble) container filled with washing powder or liquid, or other laundry related substance, for use in a washing machine or for hand washing.

Washing powders/liquids can spill and be messy to use. This container would be put straight into the machine/bowl and dissolve on contact with hot or cold water, either immediately or over a period of time or after a time delay. It would ideally be biodegradable.

This could be any shape, such as spherical (see fig. 1), "sputnik" (see fig. 2) or cube shaped needing a firm outer shell, or on the principle of a sachet or tea-bag using a softer material (see fig. 3).

The size would be sufficiently small to allow flexibility of use, e.g. use one for a half-load, two for a light load, three for a heavy wash.

The same principle can be applied to fabric conditioner, using a time delayed release so that the conditioner does not enter the wash before the rinse cycle.

DISSOLVABLE CONTAINERCLAIMS

1. A device which permits the user to do laundry or dishwashing without having to handle powders, liquids or other substances
2. Suitable for use in machines or when hand cleaning
3. Prevents mess caused by spillage as happens with products which are currently available
4. Easier and simpler to use
5. Quicker to use
6. Suitable for use by older people, those with arthritis or other restricted movements, and the blind or partially sighted. The current free-flowing powders and liquids are not
7. The fact that these are pre-filled means that dosage is more accurate, preventing deliberate or accidental overuse of cleaning agents. This is therefore both more economical and ecologically friendly
8. Dissolves into the water, and therefore does not go directly onto clothes/dishes



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Application No: GB 9520041.6  
Claims searched: 1 to 8

Examiner: Michael Conlon  
Date of search: 16 January 1997

**Patents Act 1977**  
**Search Report under Section 17**

**Databases searched:**

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.O): CSD (DDX, DHC, DHZ)

Int CI (Ed.6): C11D

Other:

**Documents considered to be relevant:**

Category	Identity of document and relevant passage		Relevant to claims
X	GB2187748 A	(Unilever)	1 to 8
X	GB2118961 A	(Firmenich)	1 to 8
X	EP0479404 A2	(Unilever)	1 to 8
X	EP0414463 A2	(Unilever)	1 to 8
X	EP0388105 A2	(Dai-Ichi)	1 to 8
X	EP0337568 A2	(Colgate-Palmolive)	1 to 8
X	US4972017 A	(Clorox)	1 to 8
X	US4410441 A	(Lever Brothers)	1 to 8
X	US4115292 A	(Procter & Gamble)	1 to 8

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

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